

Liliane F Lona

List of Publications by Year in descending order

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100
papers

2,443
citations

257450
24
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45
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102
all docs

102
docs citations

102
times ranked

2367
citing authors

#	ARTICLE	IF	CITATIONS
1	An overview on properties and applications of poly(butylene adipate- <i>co</i> -terephthalate) "PBAT based composites. Polymer Engineering and Science, 2019, 59, E7.	3.1	257
2	Mechanical, rheological and degradation properties of PBAT nanocomposites reinforced by functionalized cellulose nanocrystals. European Polymer Journal, 2017, 97, 356-365.	5.4	170
3	How do cellulose nanocrystals affect the overall properties of biodegradable polymer nanocomposites: A comprehensive review. European Polymer Journal, 2018, 108, 274-285.	5.4	150
4	Porous nanocellulose gels and foams: Breakthrough status in the development of scaffolds for tissue engineering. Materials Today, 2020, 37, 126-141.	14.2	134
5	Isolation and surface modification of cellulose nanocrystals from sugarcane bagasse waste: From a micro- to a nano-scale view. Applied Surface Science, 2018, 436, 1113-1122.	6.1	129
6	Polymer Composites Reinforced with Natural Fibers and Nanocellulose in the Automotive Industry: A Short Review. Journal of Composites Science, 2019, 3, 51.	3.0	124
7	Nanocellulose/bioactive glass cryogels as scaffolds for bone regeneration. Nanoscale, 2019, 11, 19842-19849.	5.6	93
8	Functionalized cellulose nanocrystals as reinforcement in biodegradable polymer nanocomposites. Polymer Composites, 2018, 39, E9.	4.6	88
9	Neural network applications in polymerization processes. Brazilian Journal of Chemical Engineering, 2005, 22, 401-418.	1.3	68
10	Environmentally friendly polymer composites based on PBAT reinforced with natural fibers from the amazon forest. Polymer Composites, 2019, 40, 3351-3360.	4.6	45
11	Heterogeneous modeling for fluidized-bed polymerization reactor. Chemical Engineering Science, 2001, 56, 963-969.	3.8	44
12	Modeling of the Nitroxide-Mediated Radical Copolymerization of Styrene and Divinylbenzene. Macromolecular Reaction Engineering, 2009, 3, 288-311.	1.5	44
13	Study of thermal and mechanical properties of PMMA/LDHs nanocomposites obtained by in situ bulk polymerization. Composites Part A: Applied Science and Manufacturing, 2011, 42, 1025-1030.	7.6	44
14	Simulation of Styrene Polymerization by Monomolecular and Bimolecular Nitroxide-Mediated Radical Processes over a Range of Reaction Conditions. Macromolecular Theory and Simulations, 2007, 16, 194-208.	1.4	41
15	Silver nanoparticles coated with dodecanethiol used as fillers in non-cytotoxic and antifungal PBAT surface based on nanocomposites. Materials Science and Engineering C, 2019, 98, 800-807.	7.3	37
16	A Comparison of Reaction Mechanisms for Reversible Addition-Fragmentation Chain Transfer Polymerization Using Modeling Tools. Journal of Macromolecular Science - Pure and Applied Chemistry, 2006, 43, 1293-1322.	2.2	36
17	Effect of phosphate concentration on the production of dextranucrase by <i>Leuconostoc mesenteroides</i> NRRL 512F. Bioprocess and Biosystems Engineering, 2003, 26, 57-62.	3.4	35
18	Cellulose nanocrystal-based poly(butylene adipate- <i>co</i> -terephthalate) nanocomposites covered with antimicrobial silver thin films. Polymer Engineering and Science, 2019, 59, E356.	3.1	31

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19	The effect of maltose on dextran yield and molecular weight distribution. Bioprocess and Biosystems Engineering, 2005, 28, 9-14.	3.4	30
20	Multizone circulating reactor modeling for gas-phase polymerization. I. Reactor modeling. Journal of Applied Polymer Science, 2004, 93, 1042-1052.	2.6	28
21	Ultrathin polymer fibers hybridized with bioactive ceramics: A review on fundamental pathways of electrospinning towards bone regeneration. Materials Science and Engineering C, 2021, 123, 111853.	7.3	28
22	Controlled Free-Radical Copolymerization Kinetics of Styrene and Divinylbenzene by Bimolecular NMRP using TEMPO and Dibenzoyl Peroxide. Journal of Macromolecular Science - Pure and Applied Chemistry, 2006, 43, 995-1011.	2.2	27
23	LDPE-based composites reinforced with surface modified cellulose fibres: 3D morphological and morphometrical analyses to understand the improved mechanical performance. European Polymer Journal, 2019, 117, 105-113.	5.4	26
24	Assessing the Importance of Diffusion-Controlled Effects on Polymerization Rate and Molecular Weight Development in Nitroxide-Mediated Radical Polymerization of Styrene. Journal of Macromolecular Science - Pure and Applied Chemistry, 2007, 44, 193-203.	2.2	25
25	In situ synthesis, morphology, and thermal properties of polystyrene-MgAl layered double hydroxide nanocomposites. Polymer Engineering and Science, 2012, 52, 1754-1760.	3.1	25
26	A Protocol for the Estimation of Parameters in Process Models: Case Studies with Polymerization Scenarios. Macromolecular Theory and Simulations, 2004, 13, 115-132.	1.4	24
27	Effect of the addition of inert or TEMPO-capped prepolymer on polymerization rate and molecular weight development in the nitroxide-mediated radical polymerization of styrene. Journal of Applied Polymer Science, 2008, 109, 3665-3678.	2.6	23
28	Another Perspective on the Nitroxide Mediated Radical Polymerization (NMRP) of Styrene Using 2,2,6,6-Tetramethyl-1-piperidinyloxy (TEMPO) and Dibenzoyl Peroxide (BPO). Journal of Macromolecular Science - Pure and Applied Chemistry, 2007, 44, 337-349.	2.2	22
29	Thermal polymerization of styrene in the presence of TEMPO. Chemical Engineering Science, 2009, 64, 304-312.	3.8	20
30	A Combined Computational and Experimental Study on the Polymerization of ϵ -Caprolactone. Industrial & Engineering Chemistry Research, 2018, 57, 13387-13395.	3.7	20
31	Optimizing panose production by modeling and simulation using factorial design and surface response analysis. Journal of Food Engineering, 2006, 75, 433-440.	5.2	19
32	A replicated investigation of nitroxide-mediated radical polymerization of styrene over a range of reaction conditions. Canadian Journal of Chemical Engineering, 2008, 86, 879-892.	1.7	19
33	S�ntese e caracteriza��o de Nanocom��sitos Esfoliados de Poliestireno: Hidr�xido Duplo Lamelar via polimeriza��o in situ. Polimeros, 2011, 21, 34-38.	0.7	19
34	Fluidized-bed reactor modeling for polyethylene production. Journal of Applied Polymer Science, 2001, 81, 321-332.	2.6	18
35	Polystyrene/kaolinite nanocomposite synthesis and characterization via in situ emulsion polymerization. Polymer Bulletin, 2015, 72, 387-404.	3.3	18
36	Multizone circulating reactor modeling for gas-phase polymerization. II. Reactor operating with gas barrier in the downer section. Journal of Applied Polymer Science, 2004, 93, 1053-1059.	2.6	17

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37	Effect of initiator type and concentration on polymerization rate and molecular weight in the bimolecular nitroxide-mediated radical polymerization of styrene. <i>Advances in Polymer Technology</i> , 2010, 29, 11-19.	1.7	17
38	Inverse modeling applications in emulsion polymerization of vinyl acetate. <i>Chemical Engineering Science</i> , 2004, 59, 3159-3167.	3.8	15
39	Nitroxide-mediated radical copolymerization of styrene and divinylbenzene: increased polymerization rate by using TBEC as initiator. <i>Journal of Materials Science</i> , 2010, 45, 1878-1884.	3.7	15
40	Styrene ATRP using the new initiator 2,2,2-tribromoethanol: Experimental and simulation approach. <i>Polymer Engineering and Science</i> , 2015, 55, 2270-2276.	3.1	15
41	Correlation between water absorption and mechanical properties of polyamide 6 filled with layered double hydroxides (LDH). <i>Materials Research Express</i> , 2018, 5, 065004.	1.6	15
42	Tin(II) 2-ethylhexanoate and ascorbic acid as reducing agents in solution ARGET ATRP: A kinetic study approach by mathematical modeling and simulation. <i>Chemical Engineering Journal</i> , 2019, 364, 186-200.	12.7	15
43	Synthesis and characterization of LDHs/PMMA nanocomposites: Effect of two different intercalated anions on the mechanical and thermal properties. <i>Journal of Applied Polymer Science</i> , 2012, 124, 1764-1770.	2.6	14
44	Simulation of temperature effect on the structure control of polystyrene obtained by atom-transfer radical polymerization. <i>Polimeros</i> , 2016, 26, 313-319.	0.7	14
45	Encapsulation of N,N'-diethyl- <i>meta</i> -toluamide (DEET) via miniemulsion polymerization for temperature controlled release. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47139.	2.6	14
46	Silver nanoparticles incorporated into nanostructured biopolymer membranes produced by electrospinning: a study of antimicrobial activity. <i>Brazilian Journal of Pharmaceutical Sciences</i> , 2015, 51, 911-921.	1.2	13
47	Numerical simulation and parametric study of solution ARGET ATRP of styrene. <i>Computational Materials Science</i> , 2016, 124, 211-219.	3.0	13
48	Optimization of reaction conditions in functionalized polystyrene synthesis via ATRP by simulations and factorial design. <i>Polymer Bulletin</i> , 2016, 73, 1795-1810.	3.3	13
49	Effect of Layered Double Hydroxides on the Mechanical, Thermal, and Fire Properties of Poly(methyl Tj ETQq1 1 0.784314 rgBT /Over	1.7	12
50	Kinetic modeling of atom-transfer radical polymerization: inclusion of break reactions in the mechanism. <i>Polymer Bulletin</i> , 2016, 73, 2105-2119.	3.3	12
51	Artificial neural networks towards average properties targets in styrene ARGET-ATRP. <i>Chemical Engineering Journal</i> , 2021, 407, 126999.	12.7	12
52	Fluidized-bed reactor and physical-chemical properties modeling for polyethylene production. <i>Computers and Chemical Engineering</i> , 1999, 23, S803-S806.	3.8	11
53	Developing an educational software for heat exchangers and heat exchanger networks projects. <i>Computers and Chemical Engineering</i> , 2000, 24, 1247-1251.	3.8	11
54	APPLICATION OF NEURAL NETWORKS FOR THE DEFINITION OF THE OPERATING CONDITIONS OF FLUIDIZED BED POLYMERIZATION REACTORS. <i>Polymer-Plastics Technology and Engineering</i> , 2002, 10, 181-192.	0.7	11

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55	Continuous polymerization in tubular reactors with prepolymerization: Analysis using two-dimensional phenomenological model and hybrid model with neural networks. Journal of Applied Polymer Science, 2004, 91, 871-882.	2.6	11
56	Nitroxide-mediated radical polymerization of styrene using mono- and di-functional initiators. Chemical Engineering Science, 2007, 62, 5240-5244.	3.8	11
57	Layered double hydroxides as fillers in poly(l-lactide) nanocomposites, obtained by in situ bulk polymerization. Polimeros, 2016, 26, 106-114.	0.7	10
58	Modeling of Ring Opening Polymerization: A short review with insights on how to develop the method of moments. Chemical Engineering Science, 2021, 246, 116934.	3.8	10
59	Synthesis and characterization of biodegradable poly(l-lactide)/layered double hydroxide nanocomposites. Polymer Bulletin, 2014, 71, 2235-2245.	3.3	9
60	Comparison between cellulose nanocrystal and microfibrillated cellulose as reinforcement of poly(vinyl acetate) composites obtained by either in situ emulsion polymerization or a simple mixing technique. Cellulose, 2021, 28, 2273-2286.	4.9	9
61	Evaluation of the effect of dry-film biocides on paint film preservation using neural networks. Brazilian Journal of Chemical Engineering, 2010, 27, 643-651.	1.3	8
62	Kinetics of Nitroxide Mediated Radical Polymerization of Styrene with Unimolecular Initiators. Macromolecular Symposia, 2010, 289, 95-107.	0.7	8
63	S�ntese e caracteriza��o de nanocomp��sitos de poliestireno/hidroxissal lamelar. Qu�mica Nova, 2014, 37, 18-21.	0.3	8
64	Heterogeneous modeling of fluidized bed polymerization reactors. Influence of mass diffusion into the polymer particle. Computers and Chemical Engineering, 2002, 26, 841-848.	3.8	7
65	Modeling Insights on the TEMPO Mediated Radical Polymerization of Styrene. Journal of Macromolecular Science - Pure and Applied Chemistry, 2011, 48, 681-687.	2.2	7
66	<i>In situ</i> synthesis of polystyrene nanocomposites with layered double hydroxide with an unusual anion arrangement: Morphology and thermal and mechanical properties. Journal of Applied Polymer Science, 2016, 133, .	2.6	7
67	The economics of the detailed design of heat exchanger networks using the Bell Delaware method. Computers and Chemical Engineering, 2000, 24, 1349-1353.	3.8	6
68	COMPARATIVE TRENDS OF COPOLYMERIZATIONS INVOLVING ALPHA METHYL STYRENE AT ELEVATED TEMPERATURES 1*. Polymer-Plastics Technology and Engineering, 2002, 10, 285-309.	0.7	6
69	Artificial Neural Networks Associated to Calorimetric Measurements Used as a Method to Predict Polymer Composition of High Solid Content Emulsion Copolymerizations. Macromolecular Materials and Engineering, 2005, 290, 485-494.	3.6	6
70	Emulsion Polymerization of Styrene Mediated by TEMPO at Low Temperature. Macromolecular Reaction Engineering, 2012, 6, 516-522.	1.5	6
71	Prepara��o e avalia��o de nanocomp��sitos de poliestireno - hidr��xido duplo lamelar HDL de ZnAl ��� organofuncionalizado com laurato/palmitato. Polimeros, 2015, 25, 117-124.	0.7	6
72	Vegetable Oils Acting as Encapsulated Bioactives and Costabilizers in Miniemulsion Polymerization Reactions. European Journal of Lipid Science and Technology, 2018, 120, 1700130.	1.5	6

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73	Effect of layered hydroxide salts, produced by two different methods, on the mechanical and thermal properties of poly(methyl methacrylate). Polymer Engineering and Science, 2019, 59, 1065-1074.	3.1	6
74	Synthesis and analysis of phase segregation of polystyrene- <i>g</i> -poly(methyl methacrylate) block copolymer. Journal of Applied Polymer Science, 2020, 137, 49416.	2.6	6
75	Fluidized bed reactor for polyethylene production. The influence of polyethylene prepolymerization. Brazilian Journal of Chemical Engineering, 2000, 17, 163-170.	1.3	6
76	Electromagnetic evaluation of radar absorbing materials based on conducting polypyrrole and inorganic nanocomposite of polypyrrole/kaolinite. Journal of Applied Polymer Science, 2022, 139, 52023.	2.6	6
77	New emulsion polymerization tubular reactor with internal angular baffles: Reaction temperature effect. Journal of Applied Polymer Science, 2006, 100, 2572-2581.	2.6	5
78	Bifunctional initiators on the polymerization of vinyl acetate. Journal of Applied Polymer Science, 2013, 127, 1711-1716.	2.6	5
79	Simulation of the Equilibrium Constant Effect on the Kinetics and Average Properties of Polystyrene Obtained by ATRP. Journal of the Brazilian Chemical Society, 2013, , .	0.6	5
80	Effect of Lignin without Surface Treatment in <i>In Situ</i> Methyl Methacrylate Miniemulsion Polymerization. ACS Sustainable Chemistry and Engineering, 2022, 10, 3219-3226.	6.7	5
81	Development of Polymer Resins using Neural Networks. Polimeros, 2002, 12, 164-170.	0.7	4
82	Evaluation of Organically Modified Layered Double Hydroxides as Fillers for the Preparation of Polymer Nanocomposites in Miniemulsion Polymerization. Macromolecular Reaction Engineering, 2020, 14, 1900049.	1.5	4
83	Modeling and simulation of high-pressure industrial autoclave polyethylene reactor. EXPRESS Polymer Letters, 2008, 2, 57-64.	2.1	4
84	Cellulose nanocrystals as initiator of ring-opening polymerization of ϵ -caprolactone: Mathematical modeling and experimental verification. European Polymer Journal, 2022, 170, 111171.	5.4	4
85	Predição do comportamento térmico de tubos compostos através de redes neurais. Polimeros, 2004, 14, 295-300.	0.7	3
86	Development of a software to simulate free radical polymerization of linear and branched polymer using mono- and Bi-functional initiators. Computer Aided Chemical Engineering, 2005, , 445-450.	0.5	3
87	Analyzing the real advantages of bifunctional initiator over monofunctional initiator in free radical polymerization. Journal of Applied Polymer Science, 2010, 117, n/a-n/a.	2.6	2
88	Living free radical polymerization using cyclic trifunctional initiator. Journal of Applied Polymer Science, 2012, 124, 3900-3904.	2.6	2
89	Synthesis of heat exchanger networks considering stream splitting and the rigorous calculation of the heat transfer coefficient according to the bell delaware method. Computer Aided Chemical Engineering, 2000, , 1027-1032.	0.5	1
90	A Practical Approach To Simulate Polymerizations with Minimal Information. Industrial & Engineering Chemistry Research, 2005, 44, 2634-2648.	3.7	1

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91	Finite volume method as the numerical method for new emulsion polymerization tubular reactor with internal angle baffles. Journal of Applied Polymer Science, 2006, 102, 6037-6048.	2.6	1
92	Modelling and simulation of high pressure industrial autoclave polyethylene reactor. Computer Aided Chemical Engineering, 2006, 21, 639-644.	0.5	1
93	Enhancement of Mechanical and Thermal Properties of Poly(L-lactide) Nanocomposites Filled with Synthetic Layered Compounds. International Journal of Polymer Science, 2017, 2017, 1-8.	2.7	1
94	AN ALTERNATIVE ROUTE TO PRODUCE STANDARDS FOR GEL PERMEATION CHROMATOGRAPHY USING NITROXIDE MEDIATED POLYMERIZATION. Brazilian Journal of Chemical Engineering, 2017, 34, 283-293.	1.3	1
95	The fluidized bed reactor with a prepolymerization system and its influence on polymer physicochemical characteristics. Brazilian Journal of Chemical Engineering, 2003, 20, 171-179.	1.3	1
96	Artificial neural networks associated to calorimetry to preview polymer composition of high solid content emulsion copolymerizations. , 0, , .		0
97	Simulação numérica aplicada para avaliar o efeito da pré-polimerização no comportamento de reatores tubulares. Polimeros, 2007, 17, 250-257.	0.7	0
98	Polystyrene Produced by a Multifunctional Initiator. Computer Aided Chemical Engineering, 2009, , 1077-1081.	0.5	0
99	Characterization by TEM of kaolinite to production of polymer nanocomposites. , 2012, , .		0
100	Encapsulação do óleo de neem pela técnica de miniemulsificação/evaporação do solvente. , 0, , .		0